



KJ's Educational Institute
KJ College of Engineering & Management Research

(Accredited by NAAC)

Sr. No. 25 & 27, Kondhwa - Saswad Road, Near Bopdev Ghat, Pune 411048.

Department of Computer Engineering

1. About Centre of Excellence lab

KJ College of Engineering and Management Research, Established Centre of Excellence in Artificial Intelligence on Birth Anniversary of Dr. A. P. J. Abdul Kalam (Missile Man of India) Dated 15th October 2022 to explore more opportunities for AI applications. It is focused on Model building in the fields of Image Classifications & Object Detection, Video Analytics, Speech Recognition, and Price prediction using machine learning.

The Centre of Excellence in Artificial Intelligence utilized for following:

- Excellence in Artificial Intelligence Research.
- Applied Artificial Intelligence: To build a vibrant community of professors, researchers, and students that apply AI to solve real industry-specific problems. Build intellectual property.
- Teaching and Outreach in Artificial Intelligence and Machine Learning.
- Research based Entrepreneurship

2. Objectives

- Conduct theoretical and applied research in the field of artificial intelligence and advanced Technologies.
- Provide training for upstream and downstream capacity enhancement for artificial intelligence
- Encourage multi-stakeholder participation and decision making in addressing the challenges raised by artificial intelligence.
- Disseminate information and encourage literacy about artificial intelligence.
- Offering Advanced programs for readying the future ready workforce in specific domains.
- Create External Funding and Opportunities.

3. Committee

Sr. No.	Name of Faculty	Designations
1	Dr. Suhas S. Khot	Chairman
2	Dr. Nikita J. Kulkarni	Coordinator
3	Prof. Aparna S. Hambarde	Secretary
4	Prof. Chandrakant B. Joshi	Technical Advisor
5	Prof. Gayatri S. Patil	Faculty Member
6	Prof. Ashwini G. Kamble	Faculty Member
7	Mr. Sagar V. Katake	Technical Assistant
8	Ms. Siddhi N. Shinde	Student Member
9	Mr. Nehar S. Surkar	Student Member

4. COE photos



Team of Centre of Excellence in AI



Students doing project under COE

5. Description of Research Grant

The Grant Ceremony of the Centre of Excellence in Artificial Intelligence, hosted at KJ College of Engineering and Management Research in Pune, marked a significant milestone in the institution's pursuit of excellence in technology and innovation. The event, held in Seminar Hall First Floor on 28 November 2023, at 11:30 am, highlighted the collaboration between academia and industry in the field of artificial intelligence.

The highlight of the ceremony was the presentation of a substantial grant amounting Rs. 5, 60,000 to the Centre of Excellence in Artificial Intelligence. This generous grant is a testimony to the commitment of Tirubaa Pvt. Limited, Pune, for the institution to foster research, development, and innovation in artificial intelligence.

The ceremony was graced by the esteemed presence of Mr. Milind Kshirsagar, Founder and Chairman of Tirubaa Pvt. Limited, Pune. His participation added a distinguished touch to the event, symbolizing the industry's recognition and support for academic endeavours in the area of artificial intelligence.

6. Research Grant Photos

➤ Inauguration Function



➤ Speech Deliver by Principal Sir



➤ **Speech Deliver by HOD (Computer Department)**



➤ **Speech Deliver by Guest**



➤ **Grant Received from Tirubaa Pvt Ltd**



List of Publications under COE

SR No	Faculty	Paper Title	Publication
Faculty Publications			
1	Dr.Rohan Kulkarni	Utilization of Machine Learning Algorithms for Precision Agriculture: Enhancing Crop Selection	International Journal of Green Intelligent Systems and Applications
2	Dr. Nikita Kulkarni	Smart Healthcare Wearable Device for Early Disease Detection using Machine Learning	International Journal of Intelligent Systems and Applications in Engineering
3	Prof.Aparna Hambarde	Implementation of Machine Learning Algorithms in IoT Smart shoe Helping Rehabilitation for visually Challenged People	Journal for Re Attach Therapy and Developmental Diversities
4	Dr.Nikita Kulkarni	Keyboard Acoustic side channel Attacks on Android Phones in the AI Era of Digital Banking: An Elementary Review	International Journal of Intelligent Systems and Applications in Engineering
5	Prof.Sagar Dol, Prof.Gayatri Patil	Optimization for Single Roller Burnishing Parameters Micro hardness of AI Alloy using Response surface Methodology	European Chemical Bulletin(Journal)
6	Dr. Rohan Kulkarni	Enhancing solar Energy Prognostics: A Machine Learning Based Approach	International Conference on Electrical, Electronics and Computer Engineering (UPCON)
7	Dr.Rohan Kulkarni	Estimation of Solar PV Plant output using Polynomial regression and ANN algorithm	Journal of Physics: Conference Series
8	Dr.Rohan Kulkarni	Estimation of Solar PV Power plant output using Machine Learning Algorithms	International Conference on Digital Applications, Transformation & Economy
9	Dr. Nikita Kulkarni, Prof.Sheetal Nirve	Object Detection for Traffic Analysis	IIP Series Journal
10	Dr.Rohan Kulkarni	Application of ML in Crop Selection for Precision Agriculture	International Conference on Digital Applications, Transformation & Economy (ICDATE)
11	Dr.Rohan Kulkarni	Estimation of Solar PV Plant Output using LSTM CNN	International Conference on Digital Applications,

		Algorithm	Transformation & Economy (ICDATE)
12	Dr.Rohan Kulkarni,Dr.Nikita Kulkarni,Dr.Neha Ganvir,Dr.Sanjay Khonde,Prof.Amruta Takawale	Anticipating Solar Photovoltaic Panel Output One Day in Advance with Gaussian Mixture Model	IEEE Explorer
<i>Student Publications</i>			
13	Prof.Harasha Jain,Samiksha Bhoir,Kalyani Dhebe,Shreya Divekar,Sonali Ghadhave	A Survey on Gas Leakage Detection and Protection using IoT and AI	International Journal of Innovative Research in Science, Engineering and Technology
14	Prof.Harasha Jain,Gorakhnath Dongare,Guruprem Singh,Abhijeet Anandgaonkar	SMART FRAMING USING IOT AND ML	International Research Journal of Modernization in Engineering Technology and Science
15	Prof.Ashwini Kamble,Siddhi Shinde, Rishikesh Pokale,Arbaz Tamboli,Sharikh Shaikh	Analyse and Forecast the Cyber Attack Detection Processing using Machine Learning Techniques	International Journal of Innovative Research in Science, Engineering and Technology
16	Prof.Ashwini Kamble,Vishal Choudhari,Azim Bagwan,Sanjana Choudhary,Rasika Gaikwad	EV Diagnostics and Anomaly Detection System for Internal Faults in Electric Vehicles	International Journal of Scientific Research in Engineering and Management
17	Prof.Tanvi Ghodke,Prathmesh Pandit,Vikram Jagtap, Vaibhavi Nanaware,Mrunal Karkud	Diabetes Detection using Foot Thermography with Deep Learning	International Journal of Innovative Research in Science, Engineering and Technology
18	Dr. Nikita Kulkarni, More Onkar Bhimrao, Mote Divya Sudhir, Mujawar Tabish Shakil, Sarode Sayali Sanjay	Intelligent Monitoring System for Battery Swapping Station for EV Charging Station with Locator using IoT	International Conference on Innovative Trends in Engineering and Technology
19	Prof. Aparna Hambarde,Chetan Dattatray Gawade,Nidhi Ganesh Chavan,Saurabh Santosh Jadhav	EV Health Monitoring Display on Android Device	International Conference on Innovative Trends in Engineering and Technology
20	Prof. Prashant Raut,Snehal Madhukar Galphade,Anushka Bharat Terwade,Dhanashree	EV Batttery parameters Monitoring with Display on Android Device	International Conference on Innovative Trends in Engineering and Technology

	Vitthal Hargude,Gayatri Ramchandra Karanjkar		
21	Prof.A.G.Kamble,Azim Zaheer Bagwan,Vishal vijay Chaudhari, Rasika Shailesh Gaikwad,,Sanjana Pramod Chaudhary	Diagnostics and Anomaly Detection System for Internal Faults in EV	International Conference on Innovative Trends in Engineering and Technology
<i>Patent</i>			
22	Dr.Nikita Kulkarni,Rangana Mahesh Kedar,Aparna Shailesh Hambarde,Sheetal Arun Nirve,Rohini Waghole,Sushma Bansidhar Akhade	Augmented Reality Glass	UK Design
23	Prof.Ashwini Kamble	Intelligent Traffic Controlling Device	UK Design
<i>Copyright</i>			
24	Dr. Prashant Raut	Terrain Recognition and Classification for Automated Vehicles using Deep Learning	Literacy/Dramatic